

#### OFFICE OF THE SECRETARY OF DEFENSE

1950 DEFENSE PENTAGON WASHINGTON, DC 20301-1950

March 19, 1981

#### ADMINISTRATIVE INSTRUCTION NO. 85

SUBJECT: Micrographic Policy

References: (a) Administrative Instruction No. 85, "Microform Policy," January 27, 1977 (hereby canceled)

- (b) <u>DoD Directive 5110.4</u>, "Washington Headquarters Services," October 1, 1977
- (c) Federal Property Management Regulations (FPMR), Part 101-11.5, "Micrographics"
- (d) through (o), see enclosure 1

#### 1. REISSUANCE AND PURPOSE

This Administrative Instruction reissues reference (a) and establishes:

- 1.1. Policies and procedures to manage the micrographic program in the Office of the Secretary of Defense (OSD); and
- 1.2. A single coordinating office to ensure that systems and equipment are acquired and managed in an efficient and economical manner.

#### 2. <u>APPLICABILITY</u>

The provisions of this Instruction apply to OSD, and other activities assigned to OSD for administrative support (hereafter referred to as "OSD Components"). It is not applicable to the Office of the Joint Chiefs of Staff.

#### 3. DEFINITIONS

The terms under this Instruction are defined in enclosure 2.

#### 4. RESPONSIBILITIES AND FUNCTIONS

- 4.1. The <u>Director</u>, <u>Washington Headquarters Services (WHS)</u>, shall, under DoD Directive 5110.4 reference (b)):
  - 4.1.1. Direct and administer the OSD micrographic program.
- 4.1.2. Coordinate the individual micrographic programs of the OSD Components.
  - 4.1.3. Designate a Program Coordinator.
- 4.2. The <u>Chief, Records Management Division, Correspondence and Directives</u> <u>Directorate, WHS</u>, acting as the OSD Micrographic Coordinator, shall:
- 4.2.1. Implement DoD Federal micrographic standards and ensure compliance with the FPMR, Part 101-11.5 (reference (c)). This includes, but is not limited to:
  - 4.2.1.1. Adhering to standards for storage of microforms.
- 4.2.1.2. Providing for archival life requirements of the various kinds of data recorded on microform. Administrative Instruction No. 15 (reference (d)) contains further information on life requirements.
- 4.2.1.3. Properly disposing of paper records affected by a microform replacement.
- 4.2.2. Coordinate with the Director for Computer Support, WHS, on any applications that may involve automatic data processing (ADP) or matters pertaining to the standardization of supporting ADP components or interfaces, such as Computer Output Microform (COM). Administrative Instruction No. 56 (reference (e)) is applicable.
- 4.2.3. Conduct liaison on micrographic matters within the Department of Defense, other Government Agencies, and industry.
  - 4.2.4. Formulate policy on micrographic management.

- 4.2.5. Conduct feasibility studies of possible applications considered by the Records Management Division, WHS, or requested by other OSD offices, ensuring that the provisions of DoD Directive 5000.19 (reference (f)), are followed. This includes an analysis of the current system, possible improvements, a cost comparison, and the benefits that will accrue if the proposed study is accepted. Any information requirements should use standard data elements and codes in accordance with the policies of DoD Directive 5000.11 (reference (g)). (Any new data elements and codes should be registered with the Directorate for Management Information Control and Analysis, Office of the Assistant Secretary of Defense (Comptroller)).
- 4.2.6. Coordinate with the Office of the Assistant Secretary of Defense (Manpower, Reserve Affairs, and Logistics) on matters pertaining to the standardization of microform equipment or to acquisitions subject to the provisions of DoD Directive 4100.33 (reference (h)).
- 4.2.7. Monitor the quality standards for the preparation and storage of microforms.
- 4.2.8. Coordinate with the appropriate Office of the Assistant Secretary of Defense (Comptroller) to ensure that data proposed for dissemination via microform adheres to policies promulgated in DoD Directive 5000.20 (reference (i)).
- 4.2.9. Ensure that requests for new systems and equipment are in compliance with this Instruction and are forwarded, together with appropriate recommendations, to the Director, WHS.

# 4.3. The <u>Heads of the OSD Components</u> shall:

- 4.3.1. Be alert to the benefits obtained by exploiting the use of micrographic technology.
- 4.3.2. Request the services of the Records Management Division, WHS, to consider the feasibility of possible applications.
- 4.3.3. Forward requests for approval of new micrographic systems to the Director, WHS, copy to Chief, Records Management Division, Correspondence and Directives Directorate, WHS. Each request shall include complete justification, benefits to be obtained, costs (equipment, supplies, services, maintenance, and installation), cost trade-offs, and nature and volume of records. Enclosure 3 describes the information necessary to justify a new system.

- 4.3.4. Ensure that the proposed acquisitions meet the requirements of DoD Directive 4100.33 (reference (h)), and that the justification is properly documented and submitted with the proposal for a new system.
- 4.3.5. Utilize only those microform formats authorized in MIL-STD-399A (reference (j)).
  - 4.3.6. Provide documentation required by OMB Circular A-76 (reference (k)).
- 4.3.7. Assume responsibility for the proper storage and inspection of microforms in their custody, as required by sections E4.3. and E4.4. of enclosure 4.
- 4.3.8. Coordinate with the Chief, Records Management Division, Correspondence and Directives Directorate, WHS, on the conversion of hard copy computer output to COM.
- 4.3.9. Ensure that the conversion to microform is an acceptable substitute for paper and that the Records Management Division, WHS, is consulted before disposition of paper files. 44 U.S.C. Ch. 31 (reference (l)) requires safeguards against the removal or destruction of essential records.
- 4.4. The <u>Director for Budget and Finance, WHS</u>, shall coordinate with the Records Management Division, Correspondence and Directives Directorate, WHS, all budget requests for micrographic equipment.
- 4.5. The <u>Director for Space Management and Services</u>, WHS, shall ensure that procurement requests for micrographic equipment have been coordinated with the Records Management Division, Correspondence and Directives Directorate, WHS.

# 5. <u>EFFECTIVE DATE</u>

This Instruction is effective immediately.

D. O. Cooke Director

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# Enclosures - 5

- E1. References, continued
- E2. Definitions
- E3. Format to be Used by OSD Components When Submitting Requests for Microform System
- E4. Standards and Guidelines for Micrographic Systems
- E5. Related Activities

#### E1. ENCLOSURE 1

#### <u>REFERENCES</u>, continued

- (d) Administrative Instruction No. 15, "Records Management," January 11, 1978
- (e) Administrative Instruction No. 56, "Data Processing Services," June 30, 1970
- (f) DoD Directive 5000.19, "Policies for the Management and Control of Information Requirements," March 12, 1976
- (g) DoD Directive 5000.11, "Data Elements and Data Codes Standardization Program," December 7, 1964
- (h) DoD Directive 4100.33, "Operation of Commercial and Industrial-Type Activities," February 25, 1980
- (i) DoD Directive 5000.20, "Management and Dissemination of Statistical Information," August 8, 1979
- (j) Standard Microform Formats, MIL-STD-399A, December 4, 1976
- (k) OMB Circular A-76, "Policies for Acquiring Commercial or Industrial Products and Services Needed by the Government," March 29, 1979
- (1) Chapter 31 of title 44, United States Code, "Records Management by Federal Agencies"
- (m) DoD Directive 4120.3, "Defense Standardization and Specification Program," February 10, 1979
- (n) DoD 4120.3-M, "Defense Standardization and Specification Program Policies, Procedures, and Instructions," August 1, 1978
- (o) Military Specification MIL-M-38748A, December 1, 1970

#### E2. ENCLOSURE 2

# **DEFINITIONS**

- E2.1.1. <u>Archival Microfilm</u>. Silver halide microfilm meeting the requirements of Federal Standard No. 125D (Film), "Photographic and Film, Photographic, Processed" (for permanent records use); American National Standards Institute (ANSI) Standard PH1.25-1976, "Specifications for Safety Photographic Film;" PH1.28-1976, "Specifications for Photographic Film for Archival Records, Silver Gelatin Type on Cellulose Ester Base;" PH1.41-1976, "Specifications for Film for Archival Records, Silver Gelatin Type on Polyester Base;" when tested by ANSI Standards PH4.8-1971, "Methylene Blue Method for Measuring Thiosulfate and Silver Densitometric Method for Measuring Residual Chemicals in Films, Plates, and Papers;" and stored in accordance with ANSI Standard PH1.43-1976, "Practice for Storage of Processed Safety Photographic Film."
- E2.1.2. <u>Computer Output Microfilm (COM)</u>. Microfilm containing data produced by a recorder from computer-generated signals.
- E2.1.3. <u>Microform Facility</u>. An area set aside for equipment and operations required in the production or reproduction of microforms either for OSD Component or Federal Government use.

#### E2.1.4. Microfilm

- E2.1.4.1. Raw (unexposed and unprocessed) film with characteristics that make it suitable for use in micrographics;
  - E2.1.4.2. The process of recording microimages on film; and
- E2.1.4.3. A fine-grain, high-resolution photographic film containing an image greatly reduced in size from the original.
  - E2.1.5. <u>Microform</u>. A term used for any form containing microimages.
- E2.1.6. <u>Micrographics</u>. The science and technology of document and information microfilming and associated microform systems.

- E2.1.7. <u>Permanent Record</u>. Any record that has been determined by the Archivist of the United States to have sufficient historical or other value to warrant its continued preservation by the Government. Administrative Instruction No. 15, "Records Management" (reference (d)), identifies OSD permanent records.
- E2.1.8. <u>Micrographic System</u>. A configuration of equipment and procedures for the production, reproduction, maintenance, storage, retrieval, display, or use of microforms. A micrographic system may involve one or more, but not necessarily all, of the functions listed above.

#### E3. ENCLOSURE 3

# FORMAT TO BE USED BY OSD COMPONENTS WHEN SUBMITTING REQUESTS FOR A MICROFORM SYSTEM

#### E3.1. FOR PROCUREMENT REQUESTS OVER \$5,000

E3.1.1. <u>Name of Activity</u>. Show complete organizational identification and physical location where proposed system will be established.

# E3.1.2. Present System

# E3.1.2.1. <u>Document Description</u>

- E3.1.2.1.1. Describe type of information such as books, catalogues, drawings, or office files.
- E3.1.2.1.2. Indicate the subject matter, retention information,\* security classification (Ref. No. SE-FB), and disposition authority, as indicated in Administrative Instruction No. 15 (reference (d)).
  - E3.1.2.1.3. Show largest, smallest, and majority of document's page sizes.
- E3.1.2.1.4. Estimate the number of documents in the files and the average number of pages in each document.
  - E3.1.2.1.5. State whether the documents are record copies or duplicates.
- E3.1.2.2. <u>File Volume</u>. State volume on hand in cubic feet; estimated weekly, monthly, or yearly accumulation in cubic feet. If more than one series of documents, show volume for each series.

#### E3.1.2.3. Files Maintenance and Disposition

E3.1.2.3.1. Describe method of referencing the file and show the number of references per day, month, or year.

<sup>\*</sup> See note at end of enclosure 3

- E3.1.2.3.2. Identify duplicates and related records series and their locations.
- E3.1.2.3.3. Identify typical users of the file by office function and position type (such as: engineer, scientist, manager), and\* grade ranges, (Ref. No. PA-SN).
- E3.1.2.3.4. Estimate the time required for typical search, the percentage of searches that require copies of documents to be made, and the method of copying.

#### E3.1.2.4. Personnel

- E3.1.2.4.1. List personnel by grade\* who (Ref. No. PA-SN) are presently employed in indexing, filing, retrieving, and copying documents.
- E3.1.2.4.2. Show hours spent in filming, updating, indexing, retrieving, copying, and disposing of documents; individually, plus total of all. Explain whether personnel are full or part-time, military or civilian.
- E3.1.2.5. <u>Equipment and Floor Space</u>. List equipment used for maintaining document files, including all file cabinets, sorting racks, desks, tables, bookcases, directly related to file operation. Indicate the floor space required.
- E3.1.2.6. <u>New Systems</u>. If this is a new system, use comparable data. If no comparable system is available, so indicate.

#### E3.1.3. Proposed System

#### E3.1.3.1. System Description

- E3.1.3.1.1. Describe proposed storage medium--aperture card, microfiche, jacket, roll film, video tape--and include microform size and reduction ratio to be used. Identify format number from MIL-STD-399A (reference (j)).
- E3.1.3.1.2. Explain the procedures for converting files and implementing the system. Indicate whether old files are to be filmed and the quantity involved.

<sup>\*</sup> See note at end of enclosure 3

- E3.1.3.1.3. Indicate the number of copies and the distribution of film to be made.
- E3.1.3.1.4. Discuss the method of retrieval, and how the film will be duplicated.
- E3.1.3.2. <u>File Volume</u>. Show the number of cubic feet of files on hand and the estimated number of images to be converted to the new system. Show the estimated annual volume to be entered into the system.

# E3.1.3.3. <u>Files Maintenance and Disposition</u>

- E3.1.3.3.1. Describe all changes that will result from conversion to the proposed system. For example, will records be centralized or decentralized? What changes will be made to filing arrangement, indexes, method, and frequency of updating? If a thesaurus or dictionary is to be developed, what is its status?
- E3.1.3.3.2. Indicate the method of disposing of noncurrent paper information after conversion to microform. Include disposition of the microform created.

#### E3.1.3.4. Retrieving and Furnishing Information

- E3.1.3.4.1. Explain the method of referencing; estimate the number of references per day and average time for each search; and indicate the type of questions to be asked of the file.
  - E3.1.3.4.2. Identify any difference in users described in E3.1.2.3.3.
- E3.1.3.4.3. Explain the method of furnishing information to and the searcher and the percentage of searches that result in duplicate microform copies or hard copy enlargements.

#### E3.1.3.5. Personnel

E3.1.3.5.1. Estimate, by grade, the number of personnel required to operate the proposed system on a continuing basis and any additional temporary personnel that are to establish the system and convert the backlog.

E3.1.3.5.2. Show the hours required for each operation (microfilming, inspecting, or mounting). If presently assigned personnel are to be used, explain the required training and its costs.

# E3.1.3.6. Equipment

- E3.1.3.6.1. Identify each item of equipment required for the proposed system, furnish make and type, and the reasons for selecting a particular type of equipment. Compare with similar equipment of other manufacturers.
- E3.1.3.6.2. Identify any OSD-operated equipment available for use in the proposed system, or explain reason for not sharing the use of existing equipment.
- E3.1.3.6.3. Indicate whether rental or purchase is contemplated, and the cost of each item. Compare lease versus purchase, allowing for a 5-year amortization.
- E3.1.3.6.4. Explain disposition to be made of equipment in use for present systems.
- E3.1.3.7. <u>Supplies</u>. Itemize supplies and costs contemplated to implement proposed system. Estimate annual requirements.

#### E3.1.3.8. Facilities

- E3.1.3.8.1. Explain the increase or decrease of floor space for proposed system over current system after backlog is converted.
- E3.1.3.8.2. Describe any changes in facilities or utilities required for new system and furnish costs, such as, temperature, humidity control, or plumbing.
  - E3.1.3.9. <u>Cost.</u> Summarize the estimated cost of the entire system.
- E3.1.3.10. <u>Schedule</u>. Prepare a schedule showing significant events and their estimated beginning and ending\* dates (YYMMDD). For example, procuring and installing equipment, modifying facilities, beginning of indexing, beginning and ending dates for backlog, and the starting date for conversion of current documents.

<sup>\*</sup> See note at end of enclosure 3

- E3.1.4. <u>Justification</u>. Conduct a cost and benefit analysis before submitting a request to establish a micrographic system. Include a comparative cost analysis in accordance with OMB Circular A-76 (reference (k)), if it meets the guidelines described therein. Include the following items:
- E3.1.4.1. An examination of the current operating system to evaluate the need for the documents or information and the use to which they are put.
- E3.1.4.2. A consideration of the alternatives to micrographics, including such measures as:
- E3.1.4.2.1. Revising records control schedules to provide for the disposition of paper records by disposal, by transfer of inactive paper records to the Federal Records Centers, or by offer of permanently valuable paper records to the National Archives and Records Service; and
- E3.1.4.2.2. Improving current retrieval and distribution procedures, using paper records.

# E3.2. PROCUREMENT REQUESTS OF LESS THAN \$5,000

Forward a written request to the Director, WHS. Furnish the information required by section E3.1., above, except that the following information may be eliminated:

- E3.2.1. Paragraph E3.1.2., subparagraphs E3.1.2.3., and E3.1.2.4.
- E3.2.2. Paragraph E3.1.3., subparagraphs E3.1.3.3.1., E3.1.3.4., E3.1.3.5., and E3.1.3.10.

#### E3.3. PROCUREMENT REQUESTS

Include a properly completed SD 474 (OSD Office Services Request Form) as an enclosure to procurement requests.

<u>Note</u>: Items marked with an asterisk (\*) have been registered in the DoD Data Element Program. Data elements and coding must be as indicated in the instructions. In cases where specific coding instructions are not provided, reference must be made to the Department of Defense Manual for Standard Data Elements, DoD 5000.12-M.

# E4. ENCLOSURE 4

#### STANDARDS AND GUIDELINES FOR MICROGRAPHIC SYSTEMS

# E4.1. PREPARATION

- E4.1.1. The integrity of the original records authorized for disposal shall be maintained by ensuring that the original microforms are adequate substitutes for the original records and serve the purpose for which such records were created or maintained. Copies shall be complete and contain all record information shown on the originals.
- E4.1.2. The records shall be arranged, identified, and indexed so that any individual document or component of the records can be located. At a minimum, the records shall include information identifying the agency and organization; the title of the records; the number or identifier for each unit of film; the security classification, if any; and the inclusive dates, names, or other data identifying the records to be included on a unit of film.

# E4.2. MICROFILMING

- E4.2.1. The film stock used to make microforms of permanent records for the purpose of disposal of the originals shall conform to Federal Standard No. 125D and be on safety-base permanent record film as specified in ANSI PH1.25-1976, "Specifications for Safety of Photographic Film;"PH1.28-1976, "Specification for Photographic Film for Archival Records, Silver Gelatin Type on Cellulose Ester Base;" PH1.41-1976, "Specifications for Photographic Film for Archival Records, Silver Gelatin Type on Polyester Base;" and tested according to PH1.29-1971, "Methods for Determining of Curl of Photographic Film;" and PH1.31-1973, "Method of Determining the Brittleness of Photographic Films." Procedures for testing are covered in Federal Standard No.170B, "Film Photographic, Black and White, Classification and Testing Methods," which cites ANSI standards. To ensure protection for permanent records, Components using microfilm systems that do not produce silver halide originals meeting the above standards shall submit with the SF 115, (Request for Records Disposition Authority), required by the FPMR (reference (c)) a schedule for the production of silver duplicates meeting the standards.
- E4.2.2. All indexes, registers, or other finding aids, if microfilmed, shall be placed in the first frames at the beginning of a roll of film or in the last frames of a microfiche

or microfilm jacket. Other index locations may be used only if dictated by special system constraints.

E4.2.3. Systems that produce original permanent records on microfilm (with no paper original (COM)) shall be designed to produce microfilm that meets these standards.

# E4.2.4. <u>Microfilm Processing</u>

- E4.2.4.1. Microforms of permanent records planned for the purpose of disposal of the original shall be processed so that the residual thiosulfate ion concentration does not exceed 0.7 microgram per square centimeter in a clear area. Agencies or services that conduct tests for Federal Agencies shall meet this requirement by performing the methylene blue test specified in ANSI PH4.8-1971. Components that do not have testing facilities or use commercial testing services shall submit a sample for testing, from a clear area of the film, measuring at least 6 square inches (12 inches of 16mm film, 6 inches of 35mm film, 3 aperture cards, or 1 microfiche) to General Services Administration (NAP), Washington, DC 20408. A charge will be made for each sample tested.
- E4.2.4.2. If the processing is to be of the reversal type, it shall be full photographic reversal, that is, develop, bleach, expose, develop, fix, and wash.

#### E4.2.5. Quality Standards

- E4.2.5.1. The method for determining minimum resolution on microforms of source documents shall conform to the Quality Index Method of determining resolution and anticipated losses when duplicating as described in the National Micrographic Association (NMA) Recommended Practice MS104.
- E4.2.5.1.1. For permanent records, a Quality Index of five is required at the third-generation level.
- E4.2.5.1.2. For nonpermanent records, a Quality Index of five is required at the level of the specific number of generations used in the system.
- E4.2.5.1.3. Resolution tests shall be performed, using the NBS 1010a Microcopy Resolution Test Chart and the patterns read following the instructions provided with the chart.
- E4.2.5.1.4. The character used to determine the height used in the Quality Index formula shall be the smallest character used to display record information.

E4.2.5.2. The background photographic densities on microforms must be appropriate to the type of documents being filmed. Recommended background densities are as follows:

Classification	Description of Documents	Background Density
Group 1	High-quality printed books, periodicals and defense typing	1.30-1.50
Group 2	Fine-line originals, letters typed with a worn ribbon, pencil writing with a soft lead, and documents with small printing	1.15-1.40
Group 3	Pencil drawing, faded printing, graph paper with pale, fine colored lines, and very small printing, such as footnotes	1.00-1.20
Group 4	Very weak pencil menuscripts and drawings, and poorly printed, faint documents	0.90-1.10
Group 5	COM	1.50-2.00

- E4.2.5.3. The procedure for density measurement is described in NMA Recommended Practice MS104-1972.
- E4.2.5.4. COM shall meet the NMA Standards MS1-1971, "Quality Standards for Computer Output Microfilm."
- E4.2.6. <u>Microforms and Formats</u>. Defense activities are limited to the formats prescribed in MIL-STD-399A (reference (j)).
- E4.2.7. <u>Microfilm Duplicating</u>. The production of more than 250 duplicates from an original microform, such as one roll of microfilm 100 feet in length or one microfiche, requires the approval of the Joint Committee on Printing, the Congress of the United States, as set forth in the Government Printing and Binding Regulations. Administrative records and accounting reports are exempted from this requirement.

#### E4.3. STORAGE

Non-permanent microform records can be safely maintained under the same conditions as most paper records. The following standards are required for storing permanent record microforms:

E4.3.1. Microforms stored in roll form shall be wound on cores or reels made of non-corroding materials such as non\ferrous metals or inert plastics. Other metals may be used, provided they are coated with a corrosion-resistant finish. Plastics and coated

metals that may exude fumes during storage may not be used. Rubber bands may not be used for confining film on reels or cores. If paper bands are used, the paper shall meet the specifications of ANSI PH1.53-1978.

- E4.3.2. Storage containers for microforms shall be made of inert materials such as metal or plastic. Containers made of paper products shall be avoided, unless the conditions prescribed in ANSI Standards PH1.53-1978 are met. The containers shall be closed to protect the microforms from environmental impurities and improper humidities.
- E4.3.3. Storage rooms or vaults for archival microforms shall be fire-resistant and must not be used for other purposes, such as storage of other materials, office space, or working areas. Protection from damage by water shall be accomplished by storing permanent record microforms above reasonably anticipated flood stages.

# E4.3.4. Environmental Conditions Required

- E4.3.4.1. The relative humidity of the storage room or vault shall range from 20 to 40 percent with an optimum of 30 percent. Rapid and wide-range humidity changes shall be avoided and not exceed a 5 percent change in a 24-hour period.
- E4.3.4.2. Temperature may not exceed 70 degrees F. Rapid and wide-range temperature changes shall be avoided and not exceed a 5 percent change in a 24-hour period. A storage temperature of 35 degrees F. or below shall be used for color film.
- E4.3.4.3. Solid particles, which may abrade film or react with the image, shall be removed by mechanical filters from air supplies, to housing or rooms used for archival storage. The mechanical filters are preferably of dry media type having a cleaning efficiency of not less than 85 percent, as determined by the stain test.
- E4.3.4.4. Gaseous impurities, such as peroxides, oxidizing agents, sulphur dioxide, hydrogen sulfide, that cause deterioration of microforms shall be removed from the air by suitable washers or absorbers. Archival microforms may not be stored in the same room with nonsilver gelatin films. They also may not be stored in another room using the same ventilation system because gases given off by the other films may damage or destroy the images on the silver archival films.

#### E4.4. <u>INSPECTION</u>

E4.4.1. Master films of OSD permanent record microfilms and records microfilmed to dispose of the original record whether held in-house or by the

Washington National Records Center shall be inspected every 2 years during their scheduled life. The inspection shall be made using a 1 percent randomly selected sample in the following categories: 70 percent, microforms not previously tested; 20 percent microforms tested in the last inspection; and 10 percent, control group. The control group shall represent samples of microforms from the oldest microforms filmed through the most current. The results of the inspection shall be reported through the Chief, Records Management Division, WHS, to General Services Administration (NC), Washington, DC 20408, 30 days after the inspection is completed. Reports shall include:

- E4.4.1.1. The quantity of microform records on hand, such as number of rolls and number of microfiche;
  - E4.4.1.2. The quantity of microforms inspected;
  - E4.4.1.3. The condition of the microforms:
  - E4.4.1.4. Any defect discovered; and
  - E4.4.1.5. Corrective action taken.
  - E4.4.2. The elements of the inspection shall consist of:
- E4.4.2.1. An inspection for aging blemishes following the guidelines in the National Bureau of Standards Handbook 96, "Inspection of Processed Photographic Record Films for Aging Blemishes;"
  - E4.4.2.2. Arereading of resolution test targets;
  - E4.4.2.3. Aremeasurement of density; and
- E4.4.2.4. Acertification of the environmental conditions under which the microforms are stored, as shown in the FPMR (reference (c)).
- E4.4.3. An inspection log shall be maintained. Information to be contained in the log shall include:

- E4.4.3.1. A complete description of all records tested (title; number or identifier for each unit of film; and inclusive\* dates, (YYMMDD), names, or other data identifying the records on the unit of film);
- E4.4.3.2. The record group, such as newly tested, previously tested, or control group;
  - E4.4.3.3. The date of inspection;
  - E4.4.3.4. The elements of inspections;
  - E4.4.3.5. The defects uncovered; and
- E4.4.3.6. The corrective action taken. In addition, the log shall contain the results of all archival film tests required by the FPMR, Part 101-11.506-3 (reference (c)).
- E4.4.4. A Component having in its custody a master microform that is deteriorating, as shown by the inspection, shall prepare a silver duplicate to replace the deteriorating master.
- E4.4.5. Components are responsible for the inspection of microfilm records transferred to Federal Records Centers.

#### E4.5. STANDARDS AND GUIDELINES FOR THE USE OF MICROFORM RECORDS

E4.5.1. The master microform shall not be used for reference purposes. Duplicates shall be used for reference and for further duplication on a recurring basis or for large-scale duplication, as for distribution of records on microform. Component procedures shall ensure that master microforms remain clean and undamaged during the duplication process.

<sup>\*</sup> See note at end of enclosure 3

E4.5.2. Components retaining the original hard copy record in accordance with an approved records disposition schedule shall apply these standards for the use of microform records. Under these circumstances no further authorization by the Archivist is required.

#### E4.6. DISPOSITION OF MICROFORM RECORDS

The disposition of microform records shall be carried out in the same manner prescribed for other types of records in Administrative Instruction No. 15 (reference (d)) with the following additional requirements:

- E4.6.1. The silver halide original (or a silver halide duplicate microform record created in accordance with FPMR, Part 101-11.506-3 (reference (c))), plus one copy (silver, diazo, or vesicular), for permanent records of each record microfilmed by a Component shall be verified for completeness and accuracy. The microforms shall be transferred to the National Archives, or to a Federal Records Center, at the time that the records are to be retired in accordance with the approved records control schedule (Administrative Instruction No. 15 (reference (d))).
- E4.6.2. The microforms shall be accompanied by information identifying the organization; the title of the records; the number or identifier for each unit of film; the security classification, if any; the inclusive\* dates (YYMMDD), names or other data identifying the records to be included on a unit of film; and a certification by a Component official that the microforms were produced in the normal course of office operations and that care has been taken to ensure that the microforms are a complete and accurate copy of the original records.

<sup>\*</sup> See note at the end of enclosure 3.

#### E5. ENCLOSURE 5

#### **RELATED ACTIVITIES**

# E5.1. GENERAL

There is ongoing activity, both in technology and standards development, inside and outside the Federal Government, that bears on the implementation of this Instruction. The standards described in the following standards programs are applicable and must be considered in any microform application.

#### E5.2. DoD STANDARDS PROGRAM

This program, prescribed by DoD Directive 4120.3 (reference (m)) and DoD 4120.3-H (reference (n)), provides for developing DoD standards for all equipment, interfaces, and software having common applications throughout the Department of Defense. Several designated standards areas now cover the subject of micrographics and microforms. Included are MIL-M-38748A (reference (o)), and MIL-STD-399A (reference (j)).

#### E5.3. FEDERAL STANDARDS PROGRAM

The National Bureau of Standards (NBS) of the Department of Commerce initiates the development of relevant mandatory Federal standards. For this purpose, NBS established special task groups to develop standards under the aegis of the Federal Information Processing Standards Coordinating and Advisory Committee.

#### E5.4. THE AMERICAN NATIONAL STANDARDS INSTITUTE (ANSI)

ANSI has work ongoing in their Committee PH4 on "Micrographic Reproduction" and X3 on "Computers and Information Processing." ANSI Committee X3 involvement pertains to COM applications.

# E5.5. THE GENERAL SERVICES ADMINISTRATION (GSA) AND THE NATIONAL ARCHIVES RECORDS SERVICE (NARS)

GSA and NARS have issued "Federal Property and Management Regulations, Part 101-11.5" (reference (c)) setting forth procedures, standards, criteria, and information pertaining to the creation and storage of archival microforms.